REMARKS

35 U.S.C. §103 Rejections

Claims 1. 6, 8, 10, 14, 15, 23 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Leftridge, Sr. (U.S. 6,570,494) in view of Grissom et al. (U.S. 6,166,996).

Claim 1 has been amended to delineate a specific frequency range of the at least one of the wing beat frequency of a dragonfly and the wing beat frequency of a damselfly to about 15 to 50 hertz. Whereas, the primary reference Leftridge `494 states that its device when activated emits ultrasonic sounds to replicate the wing-beat frequency of a dragonfly (Col. 1, Lines 61-63). Furthermore, Leftridge `494 reveals that its device may emit sonic frequencies from 11 to 12 kilohertz and 36 to 38 kilohertz (Col. 1, Lines 66-67). Claim 1 has been amended to limit the frequency of the mosquito dispersing pitch pattern to frequencies ranging from 15 to 50 Hz. which frequency range is clearly not suggested nor taught by the Leftridge `494 device which produces ultrasonic sounds and substantially higher sonic frequencies in the 11 kilohertz range and above. Applicant's device with its frequency range of 15 to 50 Hertz for the wing beat frequency of a dragonfly and the wing beat frequency of a damselfly. Leftridge `494 is inapplicable to amended claim 1. Combining Leftridge `494 with Grissom does not correct this deficiency.

Claims 6, 9, 10 and 14 are preferred embodiments of amended claim 1 and entitled to patentability on the same basis as claim 1.

Regarding claims 15, the examiner states that Leftridge's device has a generator for generating a mosquito dispersing pitch pattern having a frequency in the range of at least one of a wing beat frequency of a dragonfly and a wing beat frequency of a damselfly, i.e. ultrasonic sounds to replicate the wing-beat frequency of a dragonfly (Col. 1, Lines 61-63) and sonic frequencies from

11 to 12 kilohertz and 36 to 38 kilohertz (Col. 1, Lines 66-67). Applicant believes that Leftridge's ultrasonic sounds to replicate the wing-beat frequency of a dragonfly is erroneous. Applicant's device is limited to generating frequencies in the range of 15 to 50 Hertz for the range of at least one of a wing beat frequency of a dragonfly and a wing beat frequency of a damselfly.

Like claim 1, claim 17 has been amended to delineate a specific frequency range of the at least one of the wing beat frequency of a dragonfly and the wing beat frequency of a damselfly to about 15 to 50 hertz. Combining Leftridge with Grissom does not remedy this deficiency.

Claims 18 and 19 are preferred embodiments of amended claim 1 and entitled to patentability on the same basis as claim 1.

Like claim 1, claim 23 has been amended to delineate a specific frequency range of the at least one of the wing beat frequency of a dragonfly and the wing beat frequency of a damselfly to about 15 to 50 hertz. Combining Leftridge with Grissom does not remedy this deficiency.

Reconsideration of claims 1, 6, 9, 10, 14, 15, 17-19 and 23 under 35 U.S.C. 103(a) as being unpatentable over Leftridge in view of Grissom et al. is requested in light of the amendments and the arguments presented herein.

Based on the foregoing, applicant requests that Claims 1, 6, 9, 10, 14, 15, 17-19 and 23, as amended, be allowed.

Claims 2-5, 11-13, 16, 20-22, and 24 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Leftridge, Sr. (U.S. 6,570,494) in view of Grissom et al. (U.S. 6,166,996) and further in view of Lenhardt et al.

As to claims 2-5, claim 3 has been canceled. Moreover, the examiner states that the combination meets all the limitation of claims except it fails to show the frequency pattern is below

the ultrasonic range which is in the range of about 15-50 Hz and 20-40 Hz or is fixed at about 33.5 Hz. The examiner further states that the Lenhardt et al. device teaches the frequency pattern with low frequency (5-50 Hz) tones or noises that are generally pulsed at less than 100 Hz. The Lenhardt et al. device produces an external stimuli that alerts birds and other animals to danger and/or repels the animals from certain areas. Nowhere in the Lenhardt et al. patent does it state or suggest that the device is applicable to insects in general or mosquitoes in particular. Lenhardt et al. defines other animals as deer, rabbits and the like, ... wolves and other predatory animals (that) regularly kill live stock ... bears, wolves, alligators, etc. (Col. 1, Lines 52-56.)

> Brantingson Fishing Equipment Company v. Shimano American Corp., (1988 C.A.F.C.) 8 U.S.P.Q.2d 1669; re Laskowski (1989, C.A.F.C.) 871 F.2d 115, 10 U.S.P.Q.2d 1397. The focus under §103 is not whether each element in a claimed invention is old and unpatentable, but whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness of making the combination. Just because the prior art might be modified to form a claim structure would not have made the modification obvious unless a prior art suggested the desirability of modification.

The mere combination of prior art references does not make an invention obvious unless something in the prior art suggests or reasonably implies an advantage to be derived from uniting their teachings. Creative Pioneer Products Corp. v. K Mart Corp., 5 U.S.P.Q.2d 1841 (SD Tex, 1986). There is nothing in Lenhardt et al. to suggest the desirability, and thus the obviousness of combining a low frequency bird and other animal repelling device with a high frequency repelling device for mosquitoes.

For an invention to be obvious, references may not be combined in hindsight, there must something in the prior art as a whole to suggest the obviousness of the combination. Uniroyal, Inc. v. Rudkin - Wiley Corp., (1988 C.A.F.C.) 837 F.2d 1044, 5 U.S.P.Q.2d 1434.

For the above reasons, the Lenhardt et al. reference should be withdrawn. It is not pertinent

whether the prior art device possesses the functional characteristics of the claimed invention if the reference dose not describe or suggest its structure. In Re Mills (1990, CA FC) 916 F2d680, 16USPQ2d 1430,1433.

Reconsideration of claims 2, and 4-5 under 35 U.S.C. 103(a) as being unpatentable over Leftridge in view of Grissom et al. and further in view of Lenhardt et al. is respectfully requested in light of the arguments presented herein.

Based on the foregoing, applicant requests that claims 2, and 4-5 be allowed.

As to claim 11-13, 16, and 20-22, the arguments as to claims 2, and 4-5 are applicable here as well. Applicant respectfully requests that the Lenhardt et al. reference be withdrawn since it is not pertinent, as it applies only to birds and other enumerated animals and does not teach or suggest its use for mosquitoes.

Reconsideration of claims 11-13, 16, and 20-22 under 35 U.S.C. 103(a) as being unpatentable over Leftridge, Sr. (6,570,494) in view of Grissom et al. and in further view of Lenhardt et al. is requested in light of the amendments and the arguments presented herein.

Based on the foregoing, applicant requests that Claims 11-13, 16, and 20-22, as amended, be allowed.

Claims 24-30 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Grisson et al. (6,166,996) in view of Leftridge, Sr. (U.S. 6,570,494, in further in view of Lenhardt et al. (6,250,255). The examiner acknowledges that Grissom fails to clearly state that the limited frequency range is about 20 to 40 hertz, which corresponds to the beat of a mosquito predator, but relies on Lenhardt for the same reasons applicable to claims 2, and 4-5. The arguments as to claims 2, and 4-5 are applicable here as well. Applicant respectfully requests that the Lenhardt et al.

reference be withdrawn since it is not pertinent, as it applies only to birds and other enumerated animals and does not teach or suggest its use for mosquitoes.

Reconsideration of claims 24-30 under 35 U.S.C. 103(a) as being unpatentable over Grissom et al. in view of Leftridge, Sr. (6,570,494) and in further view of Lenhardt et al. is requested in light of the amendments and the arguments presented herein.

Based on the foregoing, applicant requests that claims 24-30, as amended, be allowed.

Allowable Subject Matter

Claims 7 and 8 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 7 and 8 have been rewritten in independent form including all of the limitations of the base claim and any intervening claims and allowance is requested.

CONCLUSION

For all the above reasons, applicant believes that all the claims presented in this application are allowable over the prior art, and any early allowance of the application is earnestly solicited. Formal drawings will be submitted upon notice of allowance.

Respectfully submitted,

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